

Comparisons of Job Characteristics

Focus Occupation: **Hydrologists (19-2043)**

Associated Occupation: **Environmental Engineering Technicians (17-3025)**

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 71

Focus Occupation: Hydrologists (19-2043)

Associated Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	15.8	17.4	>	Current knowledge level is likely sufficient
Design	5.2	11.1	12.6	>	Current knowledge level is likely sufficient
Building and Construction	4.0	10.6	7.6	<<	Extensive education and/or training may be required
Physics	4.3	10.2	15.7	>>	Current knowledge level is likely more than sufficient
Law and Government	5.9	9.5	11.3	>	Current knowledge level is likely sufficient
Biology	3.7	6.8	13.6	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 85

Focus Occupation: Hydrologists (19-2043)

Associated Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Reading Comprehension	10.7	16.3	13.9	<	A higher skill level may be required
Critical Thinking	10.8	14.5	14.5	0	Current skill level may be sufficient
Active Learning	8.7	12.6	12.2	0	Current skill level may be sufficient
Mathematics	6.2	11.3	12.8	>	Skill level is likely sufficient
Quality Control Analysis	5.9	9.7	8.1	<	A higher skill level may be required
Management of Material Resources	3.7	6.8	4.5	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 91			
Focus Occupation: Hydrologists (19-2043)					
Associated Occupation: Environmental Engineering Technicians (17-3025)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	16.6	14.6	<	Some improvement in abilities may be required
Problem Sensitivity	11.1	15.9	13.9	<	Some improvement in abilities may be required
Near Vision	11.1	14.7	11.9	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	14.5	13.4	0	Current ability level may be sufficient
Inductive Reasoning	10.2	13.6	14.6	0	Current ability level may be sufficient
Information Ordering	9.9	13.3	11.6	<	Some improvement in abilities may be required
Category Flexibility	9.0	11.8	11.2	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	10.6	13.8	>>	Current ability level is likely more than sufficient
Number Facility	6.3	10.6	10.8	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 71
Focus Occupation: Hydrologists (19-2043) Associated Occupation: Environmental Engineering Technicians (17-3025)		
Work Activities	Exclusivity of Activity	
Analyze scientific research data or investigative findings	27	
Communicate technical information	4	
Develop plans for programs or projects	31	
Explain complex mathematical information	30	
Maintain records, reports, or files	5	
Prepare technical reports or related documentation	22	
Record test results, test procedures, or inspection data	48	
Use building or land use regulations	65	
Use chemical testing or analysis procedures	54	
Use scientific research methodology	21	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 78

Focus Occupation: Hydrologists (19-2043)

Associated Occupation: Environmental Engineering Technicians (17-3025)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Business function specific software	1
Cameras	2
Chemical evaluation instruments and supplies	10
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Development software	4
Electrochemical measuring instruments and accessories	9
General laboratory glassware and plasticware and supplies	13
Hydrological instruments	31
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Laboratory heating and drying equipment	13
Laboratory ovens and accessories	15
Laboratory pumps and tubing	23
Light and wave generating and measuring equipment	4
Liquid and gas flow measuring and observing instruments	15
Liquid and solid and elemental analyzers	19
Network applications software	1
Pipettes and liquid handling equipment and supplies	16
Pumps	9
Respiratory protection	6
Sampling equipment	12
Soil measuring equipment	20
Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Water treatment and supply equipment	21
Weight measuring instruments	7

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.